

REMARKS

The following remarks are responsive to all the points of rejections raised by the Examiner in the final Office Action dated May 28, 2003. No amendments have been made to the claims. Upon entry of this paper, claims 1-23 will have been canceled and claims 24-75 remain in this application. Entry and consideration of the Response is respectfully requested.

RESPONSE TO REJECTIONS UNDER 35 U.S.C. §§102 & 103

Claims 1-23

In the Office Action, claims 1-10 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,445,416 to Kyuma et al. (hereafter Kyuma). Claims 11, 20 & 23 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 5,887,811 to Iijima et al. (hereafter Iijima). Claims 12-19, 21 and 22 stand rejected over U.S. Patent No. 5,786,853 et al. to Ohkawara et al. (hereafter Ohkawara). Claims 1-23 have been canceled, thereby rendering these rejections moot.

Claims 24-75

In the Office Action, claims 24, 27, 28, 30, 33, 34, 36, 39, 40 and 42-45 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,184,932 to Tanaka (hereafter Tanaka). Claims 46, 48-51, 54, 56-59, 62, 64-67, 70 and 73 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,438,190 to Kaneda et al. (hereafter Kaneda). Claims 25, 26, 29, 31, 32, 35, 37, 38, and 41 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Tanaka. Claims 52, 53, 60, 61, 68, and 69 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kaneda in view of Kyuma. Finally, claims 47, 55, 63, 71,

72, 74 and 75 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kaneda in view of U.S. Patent No. 5,436,684 to Hirasawa (hereafter Hirasawa). Applicant traverses the rejections for the following reasons.

In the present invention, the period at which focus states are detected is changed on the basis of a zooming speed and blurring. The blurring is caused by changes in zooming speed, and can be prevented from using the present invention.

On the contrary, Tanaka discloses a lens control method that compensates blurring, which is caused by movement of a zooming lens, by moving a compensation lens. In Tanaka, the precision of the position control of the compensation lens is improved by making the period at which the position of the compensation lens is detected and controlled shorter than the period of V-SYNC at which each image is outputted. However, in Tanaka, the period at which the focus states are detected is constant and is equal to the period of V-SYNC. Therefore, Tanaka does not disclose, teach or suggest a period at which the focus states are detected that is changed on the basis of the zooming speed. Accordingly, claims 24, 30, 36, 42 and 44 are believed to be distinguishable over Tanaka. Likewise, claims 25-29, 31-35 and 37-41 and 43 are also believed to be distinguishable over Tanaka based on their dependency from claims 24, 30, 36, and 42, respectively.

Kaneda discloses selecting the moving speed of a focus lens based on the position of a zooming lens and focus lens. The moving speed of a focus lens is changed in accordance with the depth of field and a focus state, but the period at which focus states are detected is not changed. Therefore, Kaneda does not teach or suggest the structure of the present invention, i.e., the period at which the focus states are detected being changed on the basis of a zooming speed.

Accordingly, even if a person having ordinary skill in the art were to combine the teachings of Kaneda, Kyuma, and Ohkawara, the combination still would not possess each and every element as set forth in claims 46, 54, 62, 70 and 73. Accordingly, claims 46, 54, 62, 70 and 73 are believed to be distinguishable over Kaneda, Kyuma, and Hirasawa. Likewise, claims 47-53, 55-61, 63-69, 71-72 and 74-75 are also believed to be distinguishable over Kaneda, Kyuma, and Hirasawa based on their dependency on claims 46, 54, 62, 70 and 73, respectively.

CONCLUSION

In view of the above remarks and arguments, Applicant respectfully submits that all of the pending claims are patentable over the prior art of record, and are now in condition for allowance.

AUTHORIZATION

No fee is due by filing of this paper. However, the Commissioner is hereby authorized to charge any additional fees which may be required for this amendment, or credit any overpayment to Deposit Account 13-4503, Order No. 1232-4494.

Respectfully submitted,
MORGAN & FINNEGAN, L.L.P.

Date: August 28, 2003

By: 

Mark D. Pratt
Registration No.: 45,794
(202) 857-7887 Telephone
(202) 857-7929 Facsimile

CORRESPONDENCE ADDRESS:
Morgan & Finnegan, LLP
345 Park Avenue
New York, NY 10154